

## **ABSTRACT**

The invention relates to the stabilization of enzymes through the formation of matrix stabilized enzyme crystals. A matrix stabilized enzyme crystal is formed through cross-linking a polymer having one or more reactive moieties with an enzyme crystal using a low concentration of a multi-functional cross-linking reagent. The invention includes matrix stabilized enzyme crystals of phenylalanine ammonia lyase and a method of using to treat hyperphenylalaninemia.